## §8.1: Basic Definitions

1.] Sketch the graph $G=(V, E)$ defined by

$$
\begin{aligned}
& V=\{1,2,3,4,5,6\} \\
& E=\{(1,2),(1,5),(2,3),(2,4),(3,4),(3,5),(4,3),(4,6),(5,2),(5,6)\}
\end{aligned}
$$

2.] For each graph given below, find (a) a chain that's not a path, (b) a path, (c) a cycle, $(d)$ a tree, and (e) a spanning tree.


